

Appl. No. 10/800,242
Amdt. dated May 24, 2006
Reply to Office Action of February 24, 2006

REMARKS

In response to the Office Action dated February 24, 2006, Applicants respectfully request reconsideration based on the above claim amendments and the following remarks. Applicants respectfully submit that the claims as presented are in condition for allowance.

Claims 1-8 are pending in the present application. Claims 1-8 have been rejected. Claims 1 and 5 have been amended, leaving claims 1-8 for further consideration upon the entry of the amendment. No new matter has been added by the amendment.

Claim Rejections Under 35 U.S.C. § 103

Claims 1-8 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Park et al. (WO 03/009352) in view of Mizuno (U.S. Patent No. 6,085,690) for the reasons stated on pages 2-7 of the Detailed Action. The Examiner states that Park discloses all elements of the claimed subject matter, except a showerhead isolation mechanism including a reactor block isolation flow line mounted on the reactor block of claims 1-8, which the Examiner further states is disclosed as elements 31, 11 and 27, respectively in Figure 1 of Mizuno. Applicants respectfully traverse.

A feature of the present invention includes a thin film deposition reactor having a showerhead isolation assembly to electrically isolate the showerhead from a top lid so that plasma does not leak back through the top lid. Additionally, the showerhead isolation assembly has a plurality of gas curtain holes for forming a gas curtain around the inner wall of the wafer block.

In contrast, Mizuno teaches that gas delivery parts (e.g., namely, a plurality of holes, an external purge gas supply mechanism, a ring-shaped reservoir and a porous plate) are installed in the upper wall of a reactor. They produce a flow of purge gas in the dead space and prevent process gases from entering the dead space. (Col. 5, lines 26-42). However, the gas delivery parts disclosed by Mizuno have no electrical isolating function. That is, the "showerhead isolation mechanism" of Mizuno is functionally and structurally different from the showerhead isolation assembly of the present invention.

More specially, neither Park et al. nor Mizuno teach or suggest, either alone or in combination, the showerhead isolation assembly electrically isolating the top lid from the

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showerhead, as in amended independent claims 1 and 5. Thus, claims 1 and 5, including claims depending therefrom, i.e., claims 2-4 and 6-8, define over Park et al. in view of Mizuno.

Accordingly, it is respectfully requested that the rejection to claims 1-8 under §103(a) be withdrawn and allow the same to issue.

Conclusion

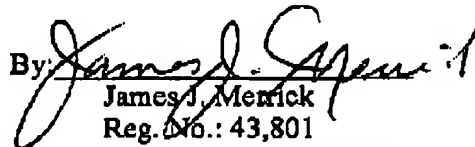
In view of the foregoing remarks distinguishing the prior art of record, Applicants submit that this application is in condition for allowance. Early notification to this effect is requested.

The Examiner is invited to contact Applicants' Attorneys at the below-listed telephone number regarding this Amendment or otherwise regarding the present application in order to address any questions or remaining issues concerning the same.

If there are any charges due in connection with this response, please charge them to Deposit Account 06-1130.

Respectfully submitted,

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